

**REMARKS**

By the foregoing Amendment, Claims 1, 24, 25 and 39 are amended and Claim 3 is cancelled. Entry of the Amendment, and favorable consideration thereof, is earnestly requested. Claims 7, 9, 14 and 67 having been previously cancelled and Claim 3 being cancelled herein, Claims 1, 2, 4-6, 8, 10-13 and 15-66 are currently pending.

Claims 24 and 25 are amended to reinsert the term "of the chewing gum polymers" at the end of the claim. This term was included in the claims as originally filed, but was apparently accidentally deleted in a previously filed Amendment.

Claim 39 has been amended to correct a grammatical error.

Claim 1 has been amended to add the limitations of previous Claim 3, and Claim 3 has been cancelled. Thus, Claim 1 now requires, among other limitations, that the difference in molecular weight between the at least two different biodegradable polymers is at least 1000 g/mol Mn.

**Rejections under 35 U.S.C § 102 (b)**

Claims 1-6, 8, 10-22, 26-29, 32-36, 38, 39, 41, 42, 46-51, 53-56, 61 and 63 were rejected under 35 U.S.C. 102(b) as being anticipated by Goldberg et al. (WO 01/47368). Applicant respectfully asks the Examiner to reconsider these rejections in view of the above Amendments and the below Remarks.

It is noted that for a § 102 rejection to be valid, the art cited must teach **all** the limitations required by the claims that define the present invention. Claim 1, as amended herein, now reads as follows:

1. Chewing gum comprising at least two different biodegradable polymers,
  - wherein said at least two different biodegradable polymers have a different glass transition temperature  $T_g$ ,
  - wherein at least one of the biodegradable polymers has a glass transition of at least  $+1^{\circ}\text{C}$ ,
  - wherein at least one of the at least two different biodegradable polymers has a glass transition temperature of less than  $0^{\circ}\text{C}$ , and
  - wherein the difference in molecular weight between the at least two different biodegradable polymers is at least 1000 g/mol  $M_n$ .

Initially, it should be noted that the chewing gum of the pending application requires two different biodegradable polymers. Applicant respectfully disagrees

with the assertion that such is anticipated by Goldberg et al. In Goldberg et al., the only gum base disclosed (Goldberg et al., Example 48) contains only one biodegradable polymer. The same is true for the disclosed chewing gum (Goldberg et al., Example 49). The contention contained in the outstanding Office Action that Goldberg et al. clearly disclose the use of two biodegradable polymers is not understood by Applicant. Goldberg et al. refers to the use of a first and a second monomer used in the preparation of the co-polymeric polyesters disclosed in Goldberg et al. This is not contested by Applicant and the use of multiple different monomers in the preparation of co-polymers is inherent in the concept of co-polymerization. However, the use of two or more different monomers (as taught by Goldberg et al.) is certainly not the same as the use of two or more different polymers (as is required by Claim 1, as amended).

To further emphasize that it is necessary to use at least two different biodegradable polymers to obtain a chewing gum according to the present invention, claim one has been amended to state that besides the difference in Tg there is also a difference in molecular weight between the applied polymers of at least 1000 g/mol Mn. As Goldberg et al. discloses only the use of two different monomers, it would be untenable to assert that Goldberg et al. discloses two different polymers having a difference in molecular weight therebetween of at least 1000 g/mol Mn.

For the reasons stated above, Applicant respectfully submits that amended Claim 1 is not anticipated by Goldberg et al. and accordingly, because Goldberg et al. does not teach or suggest every element of the present invention as claimed, this rejection under 35 U.S.C. 102(b) has been overcome and should be withdrawn.

**Rejections Under 35 U.S.C. 103 (a)**

Claims 23-25, 30, 31, 37, 40, 43, 52 and 64-66 were rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al., Claims 44 and 45 were rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. in view of Li et al. (U.S. Patent No. 6,153,231), and Claims 57-60 and 62 were rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. in view of Meyers (U.S. Patent No. 5,433,960). Applicant respectfully submits, however, that none of the cited references alone or in combination renders amended Claim 1 obvious.

Goldberg et al. is directed to an improved degradable gum base comprising a biodegradable polymer. In the examples concerning gum base (Example 48) and chewing gum (Example 49), only a gum base and a chewing gum comprising one biodegradable polymer and major parts of non-biodegradable polymers (Butyl

Rubber, Polyisobutylene and Polyvinyl Acetate) are disclosed. No degradable gum base is disclosed, no degradable chewing gum is disclosed and no chewing gum comprising at least two different biodegradable polymers which differ in Tg and molecular weight is disclosed or suggested anywhere in Goldberg et al.

The skilled person reading Goldberg et al. would learn to include a comparatively small amount of biodegradable polymer in a conventional chewing gum composition. Inventive skills have to be exercised to arrive at the present amended Claim 1 and, e.g., Examples 5 and 6 of the present application.

The surprising advantageous effects on, e.g., rheological chewing gum properties of blending at least two different biodegradable polymers have not been suggested in the prior art. On the contrary, Goldberg et al. suggest the use of conventional chewing gum polymers to achieve acceptable properties for the disclosed chewing gum. The skilled person can find no motivation in Goldberg et al. to use blends of two different biodegradable polymers in a chewing gum and diminish the use of conventional chewing gum polymers, which constitute the major part of the disclosed chewing gum in Goldberg et al.

Neither do Li et al. or Meyers disclose, teach or suggest anything that would lead one skilled in the art to use blends of two different biodegradable polymers in

a chewing gum and diminish the use of conventional chewing gum polymers, and indeed these references are cited merely for their teachings concerning the dependent concepts of incorporating a pharmaceutical agent into a chewing gum (Li et al.) or a providing a coating (Meyers) on a chewing gum.

Hence, Applicant respectfully submits that it is non-obvious to arrive at the invention embodied in Claim 1 of the present application based on the cited prior art.

Accordingly, Applicant respectfully submits that amended Claim 1 is non-obvious over Goldberg et al., Li et al. and Meyers, both when these references are taken alone and when they are combined.

#### **Double Patenting Rejections**

With respect to the provisional nonstatutory obviousness-type double patenting rejection, Applicant will consider submitting the appropriate terminal disclaimer once allowable matter has been identified in the present case.

For the foregoing reasons, Applicant respectfully submits that all pending claims, namely Claims 1, 2, 4-6, 8, 10-13 and 15-66, are patentable over the references of record, and earnestly solicits allowance of the same.

Respectfully submitted,

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/Todd M. Oberdick/  
Richard J. Basile, Reg. No. 40,501  
Todd M. Oberdick, Reg. No. 44,268  
ST. ONGE STEWARD JOHNSTON & REENS LLC  
986 Bedford Street  
Stamford, Connecticut 06905-5619  
(203) 324-6155  
Attorneys for Applicant